## Abstract

The invention relates to a method and device for establishing and maintaining defined temperature and hygrometric conditions inside premises. The method comprises the following steps: a supply reservoir (1) is filled with water; water contained in the supply reservoir (1) passes into tubes (3) or hollow profiled elements (3) of an evaporator/exchanger (2); part of the water is exuded on the outer walls of the tubes (3) or hollow profiled elements (3); a thin film of water is created on the outer walls; said film of water is subsequently evaporated, whereby the water circulating in the tubes (3) is cooled; a flow of air to be cooled is generated with the aid of ventilation means (7); the refrigerated water in said air flow is atomized with the aid of atomizing means (6) in order to create a humidified and cooled air flow.